I Introduction to CEEX

China Emissions Exchange (CEEX) was officially launched on September 11th, 2012. It is the only trading platform for carbon allowances and China Certified Emission Reduction (CCER) within the pilot zones of carbon trading in Guangdong.

CEEX started China’s first carbon allowances auction in the primary market, sealed the first transaction of CCER and comes the first in both trading volume and turnover in China. Besides, it has launched many innovative carbon finance products including allowance mortgage finance, allowance buy-back and future trading of carbon emission permits.

CEEX is committed to building a green finance service platform based in Guangdong province, serving the country and oriented towards the world in order to strong support and impetus for building Guangzhou into a national center city of carbon finance.
1. Business Scope

A. Carbon Allowance Trading

1. Products

(1) Guangdong Carbon Emission Allowance

Guangdong Carbon Emission Allowance is a CO₂ emission quota issued to companies by Guangdong Provincial Government. Compliance companies refer to electricity, steel, petrochemical, cement, aviation and paper-making companies within Guangdong’s jurisdiction (excluding Shenzhen) with an annual CO₂ emission higher than 20,000 tons (or annual comprehensive energy consumption higher than 10,000 tons of standard coal).

(2) China Certified Emission Reduction (CCER)

CCER refers to the certified reduction volume achieved by GHG voluntary emission reduction projects filed with the NDRC, which can offset the company’s carbon emission in the ratio 1:1. New energy power generation projects such as wind power, hydro-power, photovoltaic power generation, recycling projects such as coal-bed methane and landfill gas, energy conservation projects such as waste heat recovery, and forest carbon sink are the most commonly seen projects at present.

(3) Tanpuhui Certified Emission Reduction (PHCER)

PHCER refers to the certified voluntary emission reduction generated from low carbon activities implemented voluntarily by relevant companies or individuals within the PHCER pilot zones of Guangdong with the purpose of reducing GHG emission and increasing green carbon sink (Tanpuhui activities).

2. Trading Model

Trading of Listed Offers

Trading of listed offers refers to the process in which participants submit offers to buy or sell out with quantity and price, while potential buyers or sellers can check the listed offers in real time and submit requests for buying or selling. The price limit is ±10% of the opening price.

Negotiated Transfer

Negotiated transfer refers to the process in which the trading parties reach an agreement through negotiations and accomplish trading through the trading platform. The minimum amount transferred shall at least reach 100,000 tons with a price limit of ±30% of the opening price.

There is no minimum transfer limit or price limit for negotiated transfers of CCER and PHCER.
B. Carbon Finance Services

1. Mortgage Finance of Carbon Emission Allowances
   Mortgage finance of carbon emission allowances uses carbon emission allowances as collateral for financing, and the funds thus obtained will be used for the transformation of energy conservation and emission reduction of companies.

2. Buy-back of Carbon Emission Allowances
   The buy-back of carbon emission allowances refers to the trading that, when the carbon emission allowance holder in Guangdong Province (repo) sells the allowances to the buyer (reverse repo), they agree that the repo will buy back the same quantity of allowances from the reverse repo at an agreed price on a future date.

3. Securitization of Carbon-added Asset
   Asset securitization refers to the structural financing activity in which a company carries out credit enhancement for underlying assets with predictable and stable future cash flow and issues asset-backed security on this basis. The securitization of carbon-added asset refers to asset-backed securities whose underlying assets include trading products approved by competent authorities of carbon trading such as carbon emission allowance, CCER and PHCER.

4. EA-SCP
   EA-SCP refers to super short-term commercial paper issued by compliance companies with good credit ratings in the inter-bank bond market. The maturity of this commercial paper is within 270 days and its yield is associated with the trading profits of carbon allowance.

5. Forward Trading of Carbon Emission Permits
   Forward trading refers to the trading mode in which trading parties sign forward contracts and agree to conduct trading on certain amount of Guangdong carbon emission allowances or CCERs at a certain time in the future.

6. Custodial Service of Carbon Emission Allowances
   Custodial service of carbon emission allowances refers to the carbon asset management business in which compliance companies in Guangdong and CEEK investment institutions (or the trustor) entrust the self-owned allowances to eligible CEEK members (or the trustee) for holding or trading, with agreed custodial target of carbon asset management.
C. New Energy Assets Investment and Financing

Committed to the guiding principles of “providing professional service to the whole country based on the industry and market operation”, we target investors such as financial institutions and new energy companies and give a full play to the professional and technological advantages of the platform. In this way, we are able to attract eligible investors, provide market and project information for them and build a resourceful, efficient, and transparent new energy investment and financing market so as to provide standard, credit-guaranteed comprehensive services in investment and financing for all participants in China’s new energy industry.

- For investors—-we carefully select quality projects so as to save your time
- For financing parties—we design customized financing options and provide one-stop financing services
- For trading parties—we enhance your asset liquidity and offer valid pricing basis

Initiating parties of the New Energy Assets Investment and Financing Platform

- China New Energy Investment and Financing Alliance
- China Emissions Exchange
- HYDROCHINA Engineering Consulting Co., Ltd.
- Renewable Energy Department of China Electric Power Research Institute
D. Investment in Green Industry

Investment in green industry by CEEX is conducted through Guangzhou Green Industry Investment Fund Management Co., Ltd. (Guangzhou Green Investment) which focuses on investments in green industry.

1. Investment Philosophy

Guangzhou Green Investment upholds the concept of long-term value investing to achieve environment and economic benefits at the same time, focusing on “three news” investment in the green industry, namely, new pattern, new model and new technology. We try to establish a partnership investment model by providing multiple services including resources integration, market expansion, technology introduction, talent introduction and refinancing to facilitate the development and growth of the invested companies.

2. Business Models

Venture Capital

Venture capital refers to an investment model in which investments are made to start-ups or extended firms to support the implementation of their strategies and boost the commercialization and industrialization of their technological achievement so as to obtain investment return.

Pre-IPO

Pre-IPO is an investment mode in which investments are made to companies about to be listed or expected to be listed shortly so as to obtain investment return by selling shares in the public capital market after being listed.

M&A Fund

M&A fund is a means by which investors purchase equity of a target company so as to control the target company and conduct a certain degree of structural changes and the target company will be sold after a certain period of time to obtain investment return.

Investment of Other Kinds

Investment of other kinds include investment in convertible privately-raised company bonds and financial products with carried rights and interests such as income right. Investment return comes from cash flow or sale of the convertible rights and interests.

3. Investment Fields

Guangzhou Green Investment focuses on “green industries”, which include but are not limited to the following fields:

<table>
<thead>
<tr>
<th>Green energy conservation:</th>
<th>high-efficiency energy conserving equipment, new materials, green building, energy-saving information technology and services, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green environmental protection:</td>
<td>new environmental protection equipment, smart environmental protection technologies and services, resources recycling, etc.</td>
</tr>
<tr>
<td>Green energy:</td>
<td>distributed energy, clean thermal power, green supply chain, energy IoT, etc.</td>
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<tr>
<td>Green transportation:</td>
<td>green transportation equipment manufacturing, smart logistics, low carbon travel, etc.</td>
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<tr>
<td>Other strategic industries:</td>
<td>new-generation information technology, sustainable industry, healthcare, etc.</td>
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E. Green Finance

1. Green Finance Standard Formulation

As a council member of the Green Finance Committee of China Society for Finance and Banking, and a founding member of the Green Finance Standard Working Group of China Financial Standardization Technical Committee, CEEX actively participates in the formulation of many national green finance standards including carbon finance standard, green fund standard, green finance environmental information disclosure standard, etc.

2. Green Finance Consulting Services

CEEX actively participates in the green standard system formulation for the national pilot zones for green finance reform and innovations, green project construction and green project certification and rating, so as to provide references for the regulatory bodies and financial institutions, offer top-level design and consulting services in the green finance field such as environmental rights and interests, and actively promote green finance reform and innovations in the region.

3. Green Stock Index

On June 23rd, 2017, CEEX officially launched China Carbon Market 100 Index at the 6th China (Guangzhou) International Finance Expo. The index is sampled with listed companies planned to be included into the national carbon market. Companies with outstanding green performance are selected by the index which will provide solid reference for green investment, and thus incentivize companies in the Chinese carbon market to further disclose environmental information and enhance their green performance.

F. Research

1. Policy Research

CEEX conducts researches on the macro economy, industries and selected topics. We also undertake environment and energy related policy and mechanism research entrusted by the national, provincial and municipal governments and explore new businesses such as regional emission right, use-energy right and renewable energy green electricity license. We also provide insights into policies made by governments at different levels in the environment and energy field.


2. Consulting Service

We offer compliance companies a full package of environmental rights and interests asset management consulting services, including its management system, its management framework, and its value-added service, etc. We not only provide the most updated and comprehensive development and analysis, but also release research report on the environmental rights and interests element market. Up till now, we have offered environmental rights and interests asset management service to a great number of large SOEs and released multiple carbon market analysis reports.

3. Products R&D

In light of the development in the environmental rights and interests element trading market, adapting to market demand, we research and develop derivative financial service products based on environmental rights and interests elements. We strengthen analysis on the macro economic situation and environment policies, and conduct research on layout of environmental rights and interests element products such as emission right, use-energy right and urban minerals so as to foster an environmental rights and interests trading market with multiple elements.
G. Training

1. Capacity Building of the National Carbon Market

The National Carbon Market Capacity Building (Guangdong) Center was approved by the NDRC and officially established in 2016. It will serve as a model and radiator as one of the carbon trading pilots and provide comprehensive services for the construction of the national carbon market. As a leading founding member of the National Carbon Market Capacity Building (Guangdong) Center, CEEX, based on its experience from Guangdong carbon trading pilot, assists non-pilot regions in conducting training on carbon trading capacity building, strengthens exchanges and cooperation between pilot regions and non-pilot ones to jointly facilitate the building of the national carbon market.

2. Professional Training for Low Carbon Talents

Authorized by the Education and Training Center of the Ministry of Human Resources and Social Security (hereafter referred to as MHRSS), CEEX has conducted training sessions on carbon trading as well as carbon finance, with the purpose of cultivating talents with professional knowledge in both carbon trading and carbon finance for the national carbon market. Certificates are also issued by the MHRSS which fully instructs and supervises the training sessions.

(1) Training for Carbon Trading Personnel

The training course for carbon trading personnel includes carbon market mechanism design, regulation and management, trading and operation, market regulation and project development and is aimed at cultivating practical carbon trading talents meeting the national carbon market demand.

(2) Carbon Finance Training

The carbon finance training course includes domestic and foreign carbon finance theories and practices. It comprehensively discusses the innovative use of financial tools, risk management and financing approaches, with the aim to assist ambitious talents in seizing opportunities in the national carbon market.

3. Green and Low Carbon Publicity Campaign

CEEX Lecture is a public awareness campaign initiated by CEEX. Focusing on key and heated issues in the green and low carbon field, the campaign constructs a platform for exchanges between the public and experts, spreads green and low carbon concept, and shares first-hand carbon knowledge and cutting-edge information.

III History of CEEEX

- On April 10th, 2018: Guangzhou Green Industry Investment Fund Management Co., Ltd. was established.
- On January 9th, 2018: China New Energy Assets Investment and Financing Platform was officially launched.
- On December 19th, 2017: The national carbon allowance trading market was officially launched.
- On October 11th, 2017: CEEX was relocated to the pilot zone for green finance reform and innovations in Huadu District of Guangzhou.
- On June 23rd, 2017: China Carbon Market 100 Index was released at the China (Guangzhou) International Finance Expo.
- On August 3rd, 2016: The “National Carbon Market Capacity Building (Guangdong) Center” was officially unveiled.
- On February 3rd, 2016: CEEX issued business instructions of forward trading and custodial service of carbon allowance.
- On September 16th, 2015: CEEX officially launched the buy-back of carbon allowance of Guangdong Province.
- On January 14th, 2015: CEEX became one of the designated agencies for the account opening in national voluntary emission reduction trading system.
- On December 19th, 2013: The secondary market of carbon emission permit of Guangdong Province was officially launched.
- On January 8th, 2013: Reviewed and put on record by NDRC, CEEX was officially approved as one of the first five trading institutions of GHG voluntary emission reduction in China.
- On September 11th, 2012: CEEX was officially launched.